

## CONSOLIDATION

Over the last two years, mergers and competitive alliances have transformed the competitive landscape of the telecommunications market. Several of these mergers involve CAPs and long distance carriers that compete directly with U S WEST and will dramatically affect its market position over the next several years.

### MCI/MFS WORLDCom

The first major merger announced in 1997 (involving U S WEST competitors) was a union of MCI Communications of Washington, D.C. and WorldCom of Jackson, MS. The merger follows WorldCom's 1996 acquisition of Metropolitan Fiber Systems (a facilities-based competitor of U S WEST in the Phoenix area) and its 1997 acquisition of Brooks Fiber Properties. Additionally, MFS has already acquired national ISP UUNET in 1996 before its acquisition by WorldCom. The combined entity will have enormous market power in Phoenix and the United States as a whole. It combines the nation's second and fourth largest long distance companies, a major provider of competitive local communications services, and the two largest internet backbone operators in the world.

When the merger is complete (projected to happen in the third quarter of 1998), MCI WorldCom's sphere of influence in the Phoenix MSA will increase dramatically. The combined facilities will result in:

- Over 100 route miles of local fiber (including WorldCom's 75 route mile backbone and MCI's 20-30 miles)
- Two central office switches
- 70-100 "lit" buildings
- Several long-distance POPs and switches

With this merger MCI WorldCom will be able to decrease its reliance on U S WEST's services and facilities. Currently, U S WEST provisions hundred of high capacity circuits linking MCI long distance customers to the MCI POP in Phoenix. However, it will have the option of moving a large percentage of this traffic over to WorldCom facilities - resulting in a substantial reduction in MCI's costs. Because WorldCom has connected numerous buildings to its Phoenix-area network, MCI will have the option of providing true facilities-based service on a large-scale basis through the utilization of WorldCom facilities. MCI may also further decrease its reliance on U S WEST's facilities which supply the infrastructure used for the origination and termination of long-distance calls by migrating transport traffic from U S WEST-provisioned circuits to WorldCom's facilities, resulting in a reduction in MCI's operating costs as well as a reduction in U S WEST's access revenues.

Additionally, the two companies have an apparent synergy that will strengthen the merged carrier and allow it to impact the market quickly. Because WorldCom's traditional market consists of smaller and medium-sized businesses while MCI tends to focus on the large business market, there will be minimal overlap in sales forces and a less complicated integration of operations.

AT&T/TCG

Also in 1997, AT&T and TCG announced a merger that analysts expect to be complete by the end of the third quarter of this year. The acquisition provides AT&T with an easy, rapid entrance to the facilities-based local exchange and High Capacity Markets. TCG becomes the recipient of a well-established sales channel to increase its switched services customer base.

In a manner similar to the MCI/WorldCom merger, there is an apparent synergy between AT&T and TCG. Traditionally, TCG has directed its marketing efforts toward the large business market, and rapidly accumulated a customer list laden with Fortune 500 companies. Conversely, AT&T's recent strengths have been the small business and consumer markets. With the merger, AT&T will be poised to reassert its influence among large business customers and TCG will expand its penetration to include the small business market. TCG will also acquire additional resources from the merger to allocate for network expansion in the Phoenix MSA.

Like MCI, AT&T stands to benefit significantly from the merger in that it will undoubtedly lead to a reduction in operating costs in its core business - long distance. AT&T will be able to reduce its reliance on U S WEST for high capacity circuits to AT&T's customers, transport, and switched access, further reducing U S WEST's infrastructure revenues.

## COMPETITORS AT A GLANCE

The following matrices provide summary information for high capacity facilities-based competitors in the Phoenix MSA. For additional information please refer to the appendix attached.

	WorldCom	TCG	MCI
Overall Strategy	One-stop provider for communications services, including local exchange, HICAP, data, internet, long-distance.	Leading provider of communications solutions to businesses. Service packages include local, data, long-distance, HICAP.	One-stop, single billing for businesses. Services include local, long-distance, HICAP, data.
Approximate Route Miles	75	>300	20-40
On-net Buildings	>50	>150	25-35
Central Office Switching	Nortel DMS 500	Lucent 5ESS	Nortel DMS 500
Network Establishment	2Q95	2Q94	1996
Business Target Markets	Traditional focus on the middle market. Seeks national accounts, solicits to other tenants in on-net buildings. Focus on existing WorldCom, UUNET customers.	Traditional focus on high-end users, now moving "down-market." Most TCG customers have enormous communications needs.	Traditional focus on large businesses. Relies heavily on existing L.D. customer base. Reputation for outstanding customer service.
Residential Target Markets	Not actively targeting	Not actively targeting	Not actively targeting
Geographic Areas	Phoenix's central business district, Camelback/Lincoln areas, Tempe, Scottsdale, and the Sky Harbor Airport	Area wide. Central Phoenix, Camelback, Scottsdale, Tempe, Mesa, Chandler, Glendale, Paradise Valley, Phoenix Sky Harbor Intl. Airport, Tolleson	Fiber is located in Phoenix's central business district (although MCI provides services in Mesa, Scottsdale, and Tempe via resale and use of US WEST facilities)
Competitive Alliances	Pending merger with MCI to form MCI WorldCom	Pending merger with AT&T	Pending merger with WorldCom to form MCI WorldCom

(Continued on next page)

## COMPETITORS AT A GLANCE

	ELI	GST
Overall Strategy	Provider of diversified communications services, including local, L.D., HICAP, and data services	Provider of integrated communications services - DS-0 through OC-N, data services, local exchange, ISDN
Approximate Route Miles	400	11 miles in downtown Phoenix with an additional 18 miles of right-of-way and conduit available for expansion. 300 Route miles of fiber in the state of Arizona
On-net Buildings	30-45	15-25
Central Office Switching	Nortel DMS 500	Nortel DMS 500
Network Establishment	1995	1996
Business Target Markets	Middle market and high-end users, ISPs.	All business customers, large and small.
Residential Target Markets	Not currently targeting	Not currently targeting
Geographic Areas	Throughout the metropolitan area. Central Phoenix, Tempe, Mesa, Chandler, Glendale, Paradise Valley, Tolleson, Gilbert.	Downtown Phoenix and Southern Arizona
Competitive Alliances	Partnership with Salt River Project (local utility provider) in Phoenix	Formed Phoenix Fiber Access with ICG in 1995. Purchased ICG half in 1997.

## COMPETITOR CAPACITY

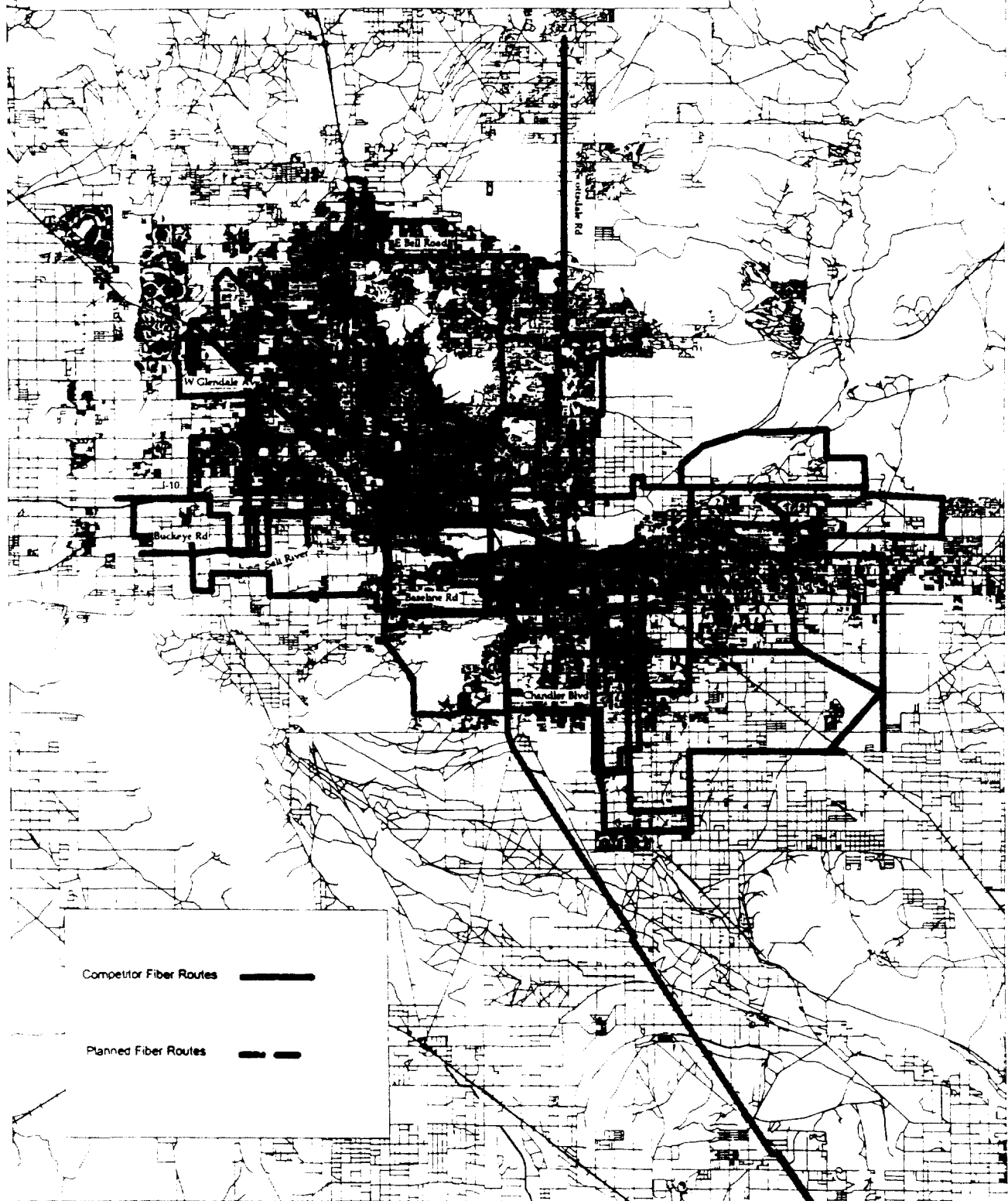
In recent years, U S WEST has become particularly vulnerable to losing additional Provider Market share due to the relative ease of switching providers (from both the wholesale and retail perspectives). During the initial infrastructure deployment, CAPs overbuilt their networks to meet the anticipated bandwidth demands of the future. Therefore, CAP networks are equipped with significantly more capacity than is currently being utilized. In fact, many industry analysts feel that several competitors are using only a small fraction of theoretical network capacity at the present time.

Two facets of CAP network construction generally contribute to their enormous capacity: 1.) the use of 144 strand optical fiber cable and 2.) adherence to SONET ring architecture. By using 144 strand cables, CAPs are capable of operating 36 "systems" across their networks (assuming a system is comprised of 4 individual fiber strands). The use of SONET ring network architecture allows CAPs to install self-healing rings that are connected, yet function independently - thereby increasing overall network capacity as rings are added to the network. Because CAPs have made several capacity allowances in the construction of their metropolitan area networks, they are able to grow and add circuits without necessitating frequent upgrades. In other words, there is a low marginal cost (from a capacity standpoint) associated with adding customers and circuits. To further facilitate the migration of traffic from RBOC facilities to competitive networks, CAPs frequently waive installation charges for new circuits.

As is the case with Provider high capacity circuits, CAPs will have little difficulty assuming Transport traffic from IXCs and other carriers. Generally, CAPs install extraordinary amounts of capacity around long distance POPs, U S WEST central offices, and competitive switching centers because of the enormous amount of traffic that originates and terminates at these facilities. In all likelihood, only a fraction of that capacity is currently being utilized and CAPs have the capability to assume Transport circuits without upgrading network capacity.

See the following page for a map of the competitor fiber routes.

## Phoenix - Competitor Fiber Routes



Several factors contribute to network capacity, including the type of fiber used, transmission software, the number of SONET rings deployed, and the number of nodes in operation. The following table is designed to provide the basic competitor facilities that contribute to the overall capacity of a network. According to QUALITY STRATEGIES estimates based on U S WEST-supplied aggregate data (including DS-1, DS-3, and optical circuits used for end user traffic and transport), U S WEST currently operates approximately 85,700 DS-1 equivalents. The existing CAP networks could easily handle all U S WEST traffic (including optical circuits) by having only three systems activated in each CAP network (or less than 8% of total capacity).

In this case, we are defining a system as consisting of four individual fibers. Since CAPs generally install 144 strand fiber in their backbones, it is possible to have 36 systems under this arrangement. Assuming that each fiber ring runs at optical speeds (OC-3 through OC-48) and that all backbone rings are comprised of 144 strand fiber, the competitive networks in Phoenix (taken together) could handle all U S West traffic at less than 8% capacity. Please refer to the table below for a detailed description of CAP capacity in Phoenix.

Network capacity estimates are calculated based on the following inputs: Backbone speeds (which vary from ring to ring), and the number of SONET rings. The number of equipment sites was not taken into account for the calculation of network capacity. Please refer to the following page for a table illustrating competitive network capacity.

## COMPETITOR CAPACITY

	<u>TCG</u>	<u>WorldCom</u>	<u>MCI</u>	<u>ELI</u>	<u>GST</u>	<u>Total</u>
Maximum Backbone Speed (in OC-n)	48	48	48	48	48	N/A
Approximate Percentage Operating at OC-48	75%	100%	100%	80%	75%	N/A
Other Backbone Speed (in OC-n)	12	0	0	12	12	N/A
Approximate Percentage Operating at that Speed	20%	0%	0%	20%	20%	N/A
Other Backbone Speed (in OC-n)	3	0	0	0	3	N/A
Approximate Percentage Operating at that Speed	5%	0%	0%	0%	5%	N/A
Average Backbone Speed (in OC-n)	38.55	48.00	48.00	40.80	38.55	N/A
SONET Rings operational in network	10	4	3	7	3	27
Approximate Capacity in OC-n	386	192	144	286	116	1,123
Approximate Capacity in DS-1 Equivalents*	10,794	5,376	4,032	7,997	3,238	31,437
Capacity Assuming 1 Systems	10,794	5,376	4,032	7,997	3,238	31,437
Capacity Assuming 3 Systems	32,382	16,128	12,096	23,990	9,715	94,311
Capacity Assuming 5 Systems	53,970	26,880	20,160	39,984	16,191	157,185

\*Note: Approximate Capacity in DS-1 Equivalents is calculated by multiplying the above OC-n value by 28.

The average backbone speed of each competitor's network is derived by using the weighted averages of the various network speeds used in their network. The average backbone speed is then multiplied by the number of SONET rings operating in the network. The product is then multiplied by 28 to get the DS-1 equivalent. Examples of capacity are therefore provided based on the assumptions regarding the number of operational systems.

## CONCLUSIONS

To date, U S WEST has lost approximately 23% of the High Capacity Market. This market includes both the Provider Market (consisting of special access and point to point circuits) and the Transport Market (consisting of circuits connecting POPs and local exchange COs).

Currently, U S WEST's share of the Provider Market is approximately 72%; down from 94% in the fourth quarter of 1994. Competitors have chipped away at U S WEST's market share through facilities buildout and alliances with interexchange carriers. Traditionally, U S WEST's facilities-based competitors have targeted its most valuable accounts - bandwidth-intensive large businesses. Because of this, CAP competitors have captured a greater percentage of the DS-3 (45 Mbps) market than the DS-1 (1.5 Mbps) market.

From a retail perspective, U S WEST maintains a billing relationship with fewer than 30% of all high capacity circuits. In other words, CAPs and IXC's maintain the end user relationship for 70% of special access high capacity circuits despite the fact that U S WEST currently provisions over 70% of these circuits.

While U S WEST's share of the Transport and Wholesale Markets are higher than its share of the Provider Market, recent incremental losses indicate that the figures may achieve parity in the near future. As of the fourth quarter of 1997, U S WEST accounts for 84% of the Transport market, down from 94% in the second quarter of the same year (six months earlier). Along the same lines, U S WEST's share of the Wholesale Market had dropped to 79% in fourth quarter 1997. Much of this share loss can be attributed to the realignment of carriers and an IXC desire to minimize the amount of business it conducts with U S WEST.

There is every indication that erosion of U S WEST's share of the Phoenix High Capacity Market will continue. Both U S WEST's relatively low Retail Market share and the enormous amount of unused capacity in competitive networks make it highly likely that U S WEST's share of the Provider and Transport Markets will continue to decline. This decline is expected to be exacerbated by continued consolidation in the telecommunications industry (e.g., the merger of AT&T and TCG).

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APPENDIX

## METHODOLOGY OVERVIEW

### MARKET SHARE SUMMARY OVERVIEW

Market share results for Provider and Retail Market are based on actual usage obtained from surveys and invoice analyses. Market share results for this project are based on customer usage as of the fourth quarter of 1997. The following steps illustrate our process for delivering end user Provider and Retail market share results for U S WEST:

#### STEP 1: COMPETITOR AND INDUSTRY ANALYSES

Multiple inputs to sampling approach and sample plan, including competitor research, proprietary regional and national databases, and pre-survey screeners.

#### STEP 2: ESTABLISH SAMPLE PLAN AND QUOTAS

Develop preliminary market share estimates, establish quotas for appropriate strata, including high penetration and low penetration strata, and sub-strata (demographics, spending levels, etc.).

#### STEP 3: DEVELOP AND SELECT SAMPLE

Develop and select stratified random sample from sampling frame constructed from multiple sources, including third-party lists of businesses and proprietary databases.

#### STEP 4: CONDUCT FIELDWORK

Collect survey data and invoices. Based on the quotas established in the sampling plan, we conduct fieldwork to collect three inputs - short form surveys, long form surveys, and invoices - on which market share results ultimately are developed.

Achieve quotas for strata, and supplement with additional interviews for low incidence strata. Calibrate self-reported data with appropriate invoice bias factors.

#### STEP 5: ANALYSIS AND REPORTING

Analyze survey data and invoice data, and develop final results.

### SAMPLING METHODOLOGIES

We develop our sampling plan using stratified random sampling techniques, which provide for efficient statistical estimates by designing the sampling plan based on particular strata (e.g., mix of utilization of competitors, demographic characteristics, geographic location, etc.) that we have developed and successfully applied over the past ten years. We utilize a mix of random and targeted surveys based on the stratified random sampling techniques. We use the random surveys to qualify respondents for different quotas established in our sampling plans. We also use the data obtained in the random surveys to establish weights for different strata when we reconstitute market share results.

### SOURCES OF MARKET SHARE DATA

Market share results are based on data acquired from multiple sources, including surveys, customer invoices, and competitor research. We use our standard HICAP survey to collect data from business customers. QUALITY STRATEGIES surveyed business customers regarding their usage of high capacity DS-1 and DS-3 services. The survey includes questions on all competitive DS-1 and DS-3 services, including CAP fiber-based services, microwave services, satellite services, and customer-owned facilities. We also use surveys to collect demographic information, perception data, and other information not available on customer invoices.

We acquire customer invoices (RBOC, CLEC, CAP, IXC, and other competitive services) to provide market share results that are based on actual customer usage. We collect customer invoices to validate self-reported data and to calibrate reconstituted market share results based on actual customer expenditures and to correct for over- and under-reporting. On an aggregate basis, we analyze differences between survey and invoice data to develop and utilize bias estimates when calculating market share results.

### STATISTICAL VALIDITY

This project is designed to provide estimates of high capacity (DS-1 and DS-3) share that are statistically valid for U S WEST's overall high capacity services compared to competitive alternatives. Sample sizes are designed to achieve statistically valid market share results for the Phoenix MSA.

High capacity (Provider and Retail) market share results for the Phoenix MSA are based on a 95% confidence level with  $\pm 5\%$  margins of error. Estimates for particular types of high capacity services (i.e., disaggregated results) are likely to have a higher margin of error. Trend results are based on a consistent methodology across time periods.

### **COMPETITOR RESEARCH OVERVIEW**

The competitive analysis is comprised of information gathered by QUALITY STRATEGIES' analysts for two separate "CAP/CLEC Network Descriptions" projects commissioned by U S WEST in the third and fourth quarters, 1997. Competitive information is gathered from numerous sources (both primary and secondary) including the following:

- Interviews with CAP/CLEC and IXC professionals, including marketing, sales, administrative, executive, and technical personnel
- Interviews with large business end users
- Interviews with equipment vendors and equipment retailers
- Secondary market research including on-line sources and public information
- QUALITY STRATEGIES' extensive, national competitor database that has been maintained and updated continuously over the last ten years

HIGH CAPACITY MARKET SHARE

High Capacity Market share is based on all end-user DS-1 and DS-3 services, including Special Access and Point-to-Point (exchange) circuits as well as transport circuits (measured in DS-1 equivalents).

Prior to 2Q97, Quality Strategies had been providing U S WEST with HICAP Track results for providers offering facilities-based service. Thus, no resellers have been included in Provider Market results. Since 2Q97, Quality Strategies has been presenting Provider results in addition to Wholesale and Retail Market results. Each set of results is clearly documented to indicate whether it encompasses facilities-based provider results, retail results that include resellers, or wholesale results.

QUALITY STRATEGIES uses DS-1 equivalents as the basis for market share estimates. Market share is provided for each service provider in terms of the percentage of DS-1 equivalents provided. Specific steps used to determine DS-1 equivalent share for each competitive category are as follows:

**A. Determination of DS-1 Equivalents.** High Capacity market share is provided on a DS-1 equivalent basis. All circuits are expressed in terms of 1.544 Mbps. QUALITY STRATEGIES uses the following calculations to determine DS-1 equivalent share:

- One (T-1) DS-1 Circuit = One DS-1 Equivalent
- (T-3) DS-3 Circuits:  $\text{Number of DS-3 Circuits} \times 28 = \text{Number of DS-1 Equivalents}$

**B. Determination of DS-1 Equivalents Percentage Share.** DS-1 equivalents are totaled, and share is presented based on the percentage of the total each carrier provides.

**Retail v. Wholesale.** As stated previously, retail circuits are sold to end users. Wholesale circuits are provided to CAP/CLECs and IXC's for resale to end users. For example, a U S West circuit could be sold to AT&T (and paid for by AT&T), but resold to AT&T long-distance customers for special access to the AT&T POP. In this case, the end user is billed by AT&T although the circuit is provisioned and maintained by U S West. In this scenario, U S West receives Provider and Wholesale Market share for the circuit while AT&T receives Retail Market credit. Share of the Wholesale Market includes both end-user and transport circuits.

QUALITY STRATEGIES provides market share estimates based on DS-1 equivalents. Market share is provided for each service provider in terms of percentage of DS-1 equivalents provided.



## ATTACHMENT C

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

Petition of U S WEST Communications, Inc.       )  
for Relief from Barriers to Deployment       )  
of Advanced Telecommunications Services       )

**PETITION FOR RELIEF**

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February 25, 1998

## **SUMMARY**

U S WEST Communications, Inc. ("U S WEST") files this Petition for Relief pursuant to 47 C.F.R. §§1.1, 1.3, and 1.401, as well as Section 706 of the Telecommunications Act of 1996. U S WEST respectfully asks the Commission to forbear from imposing certain regulatory restrictions that frustrate the deployment to rural America of advanced telecommunications capabilities. In particular, U S WEST asks the Commission (1) to allow it to build and operate packet- and cell-switched data networks across LATA boundaries, (2) to permit it to carry interLATA data traffic incident to its provision of digital subscriber line services, (3) to forbear from requiring U S WEST to unbundle for its competitors the non-bottleneck network elements used to provide these data services, and (4) to forbear from requiring U S WEST to make these competitive services available at a wholesale discount for resale. Expedited consideration is requested.

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**PETITION FOR RELIEF**

U S WEST Communications, Inc. ("U S WEST") respectfully petitions the Commission to forbear from imposing certain regulatory restrictions that frustrate the deployment to rural America of advanced telecommunications capabilities such as digital subscriber line technologies and data networking services. In particular, U S WEST asks the Commission (1) to allow it to build and operate packet- and cell-switched data networks across LATA boundaries, (2) to permit it to carry interLATA data traffic incident to its provision of xDSL services, (3) to forbear from requiring U S WEST to unbundle for its competitors the non-bottleneck network elements used to provide these data services, and (4) to forbear from requiring U S WEST to make these competitive data services available at a wholesale discount for resale. Granting this petition will allow U S WEST to expand its data offerings in a way that will increase the services available to the public and enhance the ability of all information service providers to offer advanced services, while also enabling competitive providers of data telecommunications to use U S WEST's underlying transmission facilities to serve their customers. U S WEST files this petition pursuant to 47 C.F.R. §§ 1.1, 1.3, and 1.401, as well as Section 706 of the Telecommunications Act of 1996. Expedited consideration is requested.

## **PRELIMINARY STATEMENT**

The primary goal of the Telecommunications Act, as stated in its title, is “to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.” Pub. L. No. 104-104, 110 Stat. 56 (1996). To this end, Congress directed the Commission to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans” and authorized it to use “regulatory forbearance . . . or other regulating methods that remove barriers to infrastructure investment.” Act § 706(a), codified at 47 U.S.C. § 157 note (emphasis added). The Act requires the agency to determine “whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion,” and, if not, the Commission must “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition.” Act § 706(b) (emphasis added).

Congress’s references to securing these advanced technologies for “all” Americans were deliberate. Congress recognized that rural areas of the country do not currently have the same access to telecommunications services as urban areas, and that economic barriers and low population densities make it more difficult to deploy advanced services and technologies in smaller communities. Accordingly, the Act expresses a special concern that rural Americans not be left behind: “Consumers in all regions of the Nation, including . . . those in rural, insular, and high-cost areas, should have access to telecommunications and information services, including . . . advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas.” 47 U.S.C. § 254(b)(3). See also id.

§ 254(b)(2) (“Access to advanced telecommunications and information services should be provided in all regions of the Nation.”) (emphasis added).

U S WEST is uniquely positioned to invest in the infrastructure needed to bring advanced data telecommunications and information services to “all Americans,” including residential and small-business customers, and those in harder-to-reach smaller and rural communities. It has proven itself willing and able to serve these markets. U S WEST has made by far the greatest investment in telecommunications infrastructure of any carrier in its largely rural region. It is currently rolling out advanced high-bandwidth copper-loop technologies on an aggressive schedule throughout the fourteen states in which it is an incumbent local exchange carrier. Outside that region, where the restrictions that are the subject of this petition do not apply, U S WEST has demonstrated its capability to provide customers with a full range of advanced communications, networking, and information services, and its determination to compete for the opportunity to do so.

But regulatory barriers prevent U S WEST from doing much of what it could accomplish. In its own region, U S WEST is barred outright from some advanced-service markets that would benefit enormously from new entry; for example, even though smaller communities’ links to the internet are low-bandwidth and usually congested, U S WEST is not allowed to compete to provide regional internet backbone services because it may not carry data traffic across LATA boundaries. Other regulatory burdens often make it prohibitively expensive for U S WEST to deploy advanced technologies and service in rural areas, even where it is allowed to do so; for example, it may never make economic sense for U S WEST to deploy the equipment needed to provide digital subscriber line services in thinly populated areas if it cannot

aggregate data traffic from different LATAs over its own facilities. Still other regulations, such as the Commission rules which can be read to apply the Act's unbundling and resale provisions to competitive new offerings, operate to blunt U S WEST's incentives to develop and invest in advanced technologies by requiring it to turn its innovations over to competitors risk-free at prices that may not even allow the company to recover its development costs, let alone realize the returns that normally follow successful innovation in a competitive market. U S WEST now asks the Commission to use its statutory authority to remove these barriers, and thereby carry out Congress's promise to "all Americans," including residential and rural customers.

U S WEST asks for relief from four particular regulatory burdens: the bar on building and operating cell- and packet-switched data networks that cross LATA boundaries, restrictions on interLATA data transport incident to providing digital subscriber line services, unbundling obligations for non-bottleneck data facilities, and duties to offer competitive data services to resellers at a discount.<sup>1/</sup> U S WEST notes that the regulatory relief it seeks in this petition is targeted and limited. U S WEST is not asking here for complete deregulation of these technologies, nor does it seek to avoid its obligation to make bottleneck facilities (such as the local loops over which digital subscriber line services operate, or central-office collocation space) available to its CLEC competitors. However, there are many other Commission rules originally designed to govern incumbent carriers' traditional circuit-switched offerings that

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<sup>1/</sup> As described in greater detail below, many of these services do not fit within the definition of "telephone exchange service," and accordingly would not be covered by the Act's unbundling and discounted resale language. The blanket waiver sought here would eliminate the uncertainty caused by the failure of the Commission's rules to distinguish between incumbent LECs' traditional "telephone exchange service" offerings and their advanced data offerings, an uncertainty that itself hinders the deployment of advanced technology and services.

should not be applied to their offerings of advanced data services, and U S WEST will in the future request forbearance from enforcement of these other regulations on the ground that they are unnecessary to ensure reasonable pricing or avoid discrimination in a competitive market. See 47 U.S.C. §§ 160, 161. Here, however, it seeks only the limited regulatory relief necessary to advance the deployment of specific data networking and transmission services in its region.

The relief requested herein will further the development of competition in the markets for internet access and other data networking services. U S WEST is committed to providing its data services in a manner that increases customers' choices of service providers, even in smaller communities. U S WEST currently offers the data telecommunications services discussed in this petition on an equal basis to all internet service providers ("ISPs"), including U S WEST's own internet access service. If relief is granted, end users will be able to enjoy the full benefits of U S WEST's expanded data services whether they subscribe to U S WEST's internet access service or an unaffiliated ISP. U S WEST will also continue to make unbundled conditioned loops and collocation space available at cost-based prices to ensure that competitive carriers can provide their own data telecommunications services to customers. For these reasons, granting the relief requested would not only benefit U S WEST's residential and business local exchange subscribers, but would also dramatically improve the ability of competing ISPs and carriers in U S WEST's region to offer high-bandwidth services, in both respects speeding the deployment of advanced services to rural consumers.

## **BACKGROUND**

### **U S WEST and Its Region**

U S WEST's fourteen-state region encompasses some of the most sparsely populated areas in the country and the most rugged terrain in the continental United States. U S WEST's 1,266 wire centers serve 284,000 square miles of territory. Thirty-five of these wire centers serve an area larger than 1,000 square miles each; together, they serve 59,000 square miles, or almost 21%, of U S WEST's total service area. These wire centers average a mere 3.71 residential loops per square mile served. Ninety more wire centers serve areas ranging from 500 to 1,000 square miles each, together representing another 61,600 square miles, or almost 22% of U S WEST's territory; on average, these wire centers serve only 10.7 residential loops per square mile. Data from the Commission's Industry Analysis Division confirm this picture of U S WEST's region: U S WEST serves five of the ten states requiring the greatest monthly per-loop universal service support payments, and eight out of the top twenty.<sup>2/</sup>

U S WEST's position in its region makes it the most likely company to deploy advanced telecommunications and information services on a widespread basis to rural America, as Congress intended. U S WEST is by far the largest local exchange carrier in its fourteen states, and it is required by law to serve virtually all of the residential and business customers in its service areas. In 1997 alone, U S WEST invested more than \$1.9 billion of capital to construct, improve, upgrade, and repair the telephone network within its region. Moreover, it is committed to deploying advanced data networking and transmission services as broadly as

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<sup>2/</sup> See Industry Analysis Division, Universal Support and Telephone Revenue by State, at 13 (Table 2: "USF High Cost Support"), Jan. 1998.

possible throughout its region, and its roll-out of these services has been the most aggressive of any local exchange carrier in the nation. The following examples illustrate what U S WEST has already accomplished in its region:

- **Frame relay services.** U S WEST's frame relay operations are the largest of any local exchange carrier in the nation and the third largest (behind AT&T and Sprint) overall. U S WEST has deployed over 350 frame switches across all 14 states of its region (the largest capital commitment of any carrier) and had over 47,000 customer ports at the end of 1997. It has built a statewide network in Utah (a single-LATA state) and LATA-wide networks in Oregon. U S WEST offers a complete range of access options, from 56 kilobits per second to DS-3.
- **Cell relay services/ATM.** U S WEST has deployed over 100 next-generation ATM switches across ten of its states. This technology builds on and is interoperable with U S WEST's frame relay services. The company is working with the State of Wyoming to build a statewide network to provide schools with ATM access. (Wyoming is also a single-LATA state.) U S WEST offers customers ATM access at speeds of up to DS-3 and OC-3.
- **Digital subscriber line technologies.** U S WEST recently announced the most aggressive roll-out of digital subscriber line services of any carrier in the country. As part of this roll-out, the company is currently deploying asymmetric digital subscriber line equipment in 226 central offices and wire centers in 43 cities across every one of its 14 states. Sales of these services will begin in April. U S WEST will offer users a complete range of access from 256 kilobits per second up to 7 megabits per second, with host-site connections as fast as 155 megabits per second.

As much as U S WEST has been able to achieve in its fourteen-state region, the company is capable of providing much more. Where U S WEST is not subject to the regulatory restrictions that apply to it in-region, the company is eager and able to provide customers with a full range of integrated, end-to-end data networking services. U S WEST was the first Bell company to offer out-of-region interLATA data transport services in competition with interexchange carriers' services. These include a "Super Port" service that combines local data transport with interLATA transport, internet services, operations support, equipment